

DETAILED ACTION

This office action is a response to Applicant's amendment submitted June 17, 2008, wherein claim 19 is canceled and claims 1 and 17 are amended. Claims 1-7, 11-18, and 20 are pending and are examined on the merits herein.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Paula DeGrandis on September 12, 2008.

The application has been amended as follows:

In claim 17, line 4, change "~~at least 1 hour~~" to "at least 12 hours."

Cancel claim 18.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

In view of the cancellation of claim 19, all rejections made with respect to that claim in the previous office action are withdrawn.

In view of Applicant's amendment submitted June 17, 2008, the rejections of claims 1-7 and 11-18 under 35 USC 103(a) as being unpatentable over Hu et al. in view of Butelman et al. and Konda et al. and the rejection of claim 20, further in view of Fan et al., are withdrawn. Hu teaches a similar process for the production of chitosan, but teaches much shorter reaction times. Hu also teaches that longer extraction times (60 minutes) produced chitosan with the lowest molecular weight. Thus, the skilled artisan would conclude that modification of Hu's process, including extending the reaction time, would result in further decrease in molecular weight, and would not expect that modification of Hu's process to include at least four hours of extraction time would produce chitosan of molecular weight between 80,000-258,933.

In view of the information and discussed above, the indicated subject matter is allowable over the prior art.

Accordingly, Applicant's amendment as discussed above and the Examiner's amendment presented above are sufficient to remove all rejections made in the prior office action and to place the application in condition for allowance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LAYLA BLAND whose telephone number is (571)272-9572. The examiner can normally be reached on Tuesday - Friday, 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anna Jiang can be reached on (571) 272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shaojia Anna Jiang, Ph.D./
Supervisory Patent Examiner, Art Unit 1623

/Layla Bland/
Examiner, Art Unit 1623